

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A method of detecting portable objects using a network of N antennae, controlled by a centralized management unit, comprising the following steps:

transmitting signals simultaneously to all the antennae from said management unit,

receiving a ~~resulting signal by said management unit, said resulting signal comprising~~ response signals from the antennae which have detected a portable object respectively at an input port of said management unit that is assigned to each antenna, and adding said signals to form a resulting signal, and

successively selecting each object detected from this ~~resultant~~ resulting signal, according to a pre-established sequence.

2. (Previously Presented) A detection method according to Claim 1, wherein the successive selection of each object is effected by the use of an anti-collision algorithm.

Claims 3 and 4. (Canceled)

5. (Previously Presented) A detection method according to claim 1, wherein the reception of the resulting signal includes a step of identifying the origin of the response signals forming said resulting signal.

6. (Currently Amended) A detection method according to claim ~~[[14]]~~ 5, wherein the identification of a response signal includes a step of storing the identification of the antenna associated with the input port at which the response signal is received.

7. (Previously Presented) A detection method according to Claim 6, wherein said storing step includes positioning a flip-flop in a logic state and deactivating it when the unit has entered into communication with the portable object detected by the corresponding antenna.

Claim 8. (Canceled)

9. (Currently Amended) A system of detecting portable objects including a network of N antennae associated with transmission/reception means and a centralized management unit, comprising:

transmission means in the management unit that is connected to transmission/reception means of the antennae and that sends signals simultaneously to all the antennae,

reception means in said unit that is connected to said transmission/reception means and that receives response signals from the antennae which have detected a

portable object, in the form of distinct signals for each antenna ~~[[or]]~~ respectively at an input port of said management unit that is assigned to each antenna, and adds said signals to form a resulting signal ~~in accordance with the type of connection established between the transmission and reception means of the management unit and the antennae, and~~

means for successively selecting each portable object detected according to a pre-established sequence.

10. (Previously Presented) A detection system according to Claim 9, wherein the means for successively selecting each portable object detected in a pre-established sequence includes an anti-collision algorithm.

11. (Previously Presented) A detection system according to Claim 9 wherein the transmission and reception means of the management unit and the transmission/reception means of the antenna are connected in point-to-point mode by connections of the serial transmission type.

Claim 12. (Canceled)

13. (Previously Presented) A detection system according to Claim 11, wherein the management unit includes an antenna discriminator.

Claims 14 and 15. (Canceled)